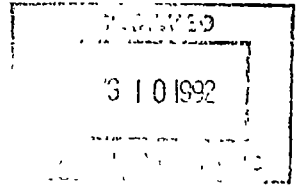


REMARKS	WELL LOG	ELECTRIC LOGS	FILE	X	WATER SANDS	LOCATION INSPECTED	SUB REPORT abd
DATE FILED	8-12-92						
LAND FEE & PATENTED	STATE LEASE NO.	ML-44443	PUBLIC LEASE NO.			INDIAN	
DRILLING APPROVED	9-9-92 (EXCEPTION LOCATION)						
SPUDDED IN							
COMPLETED	PUT TO PRODUCE						
INITIAL PRODUCTION							
CRAVITY API							
GOS							
PRODUCING ZONES							
TOTAL DEPTH							
WELL ELEVATION							
DATE ABANDONED	JAN 91						
FIELD	WILDCAT						
UNIT							
COUNTY	CARBON						
WELL NO.	STATE 4-16					API NO. 43-007-30172	
LOCATION	922' FWL				760' FWL	NW NW	16

12S	10E	16	PG & E RESOURCES CO.
-----	-----	----	----------------------



August 6, 1992

Division of Oil, Gas & Mining  
3 Triad Center, Suite 350  
Salt Lake City, UT 84180-1203

Attn: Tammi Searing

Re: PG & E Resources Company  
Castlegate Prospect  
Application for Temporary Change  
of Water  
Carbon County, Utah

Dear Tammi,

Enclosed please find one copy of the Application for Temporary Change of Water for PG & E's Castlegate Prospect in Carbon County, Utah.

As you know, several Applications for Permit to Drill have already been submitted and several additional applications will be forthcoming.

In future applications I will reference the Change Application Number (92-91-12 (91 Area), rather than send additional copies of this application.

If you should need additional information, please feel free to contact me.

Sincerely,

PERMITCO INC.

Lisa L. Smith  
Consultant for  
PG & E Resources Company

Enc.

cc: PG & E Resources - Dallas, TX  
PG & E Resources - Vernal, UT

Permitco Incorporated  
A Petroleum Permitting Company

17585 Jackson Drive Denver, Colorado 80241 (303) 452 8888



STATE OF UTAH  
NATURAL RESOURCES  
Water Rights

Norman H. Banghart, Governor  
Dee C. Hansen, Executive Director  
Robert L. Morgan, State Engineer

Southeastern Area • 4515 Carbon Avenue • P.O. Box 716 • Price, UT 84501-0716 • 801-637-1333

July 31, 1992

West Hazmat Oil Field Services Inc.  
Attn: Dale Price  
East Highway 40  
Roosevelt, Utah 84066

Re: Temporary Change Application #192-91-12  
Expiration Date: November 30, 1992

Dear Mr. Price:

The above referenced Temporary Change Application is hereby approved, and a copy is enclosed for your information and records.

If you have any questions, please feel free to contact me.

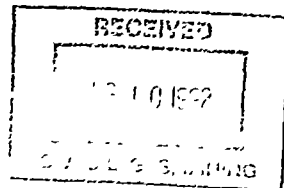
Sincerely,

*William A. Wernick*

*for* Mark P. Page  
Regional Engineer

cc: Bob Davis - Price River Commissioner

Enclosures  
MPP/mjk



# APPLICATION FOR TEMPORARY CHANGE OF WATER

AUG 10 1992

STATE OF UTAH

JUL 31 1992

DIV. OIL, GAS, MINING

WATER RIGHTS

Rec. by \_\_\_\_\_

Fee Paid \$ \_\_\_\_\_

Receipt # \_\_\_\_\_

Microfilmed \_\_\_\_\_

Roll # \_\_\_\_\_

For the purpose of obtaining permission to make a temporary change of water in the State of Utah, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of Section 73-3-3 Utah Code Annotated 1992, as amended.

\*WATER RIGHT NO. 91 Area \_\_\_\_\_ \*APPLICATION NO. 1 92 91 12

Changes are proposed in (check those applicable)

☒ point of diversion. ☒ place of use. ☒ nature of use. ☒ period of use.

## 1. OWNER INFORMATION

Name: West Hazmat Oil Field Services Inc. \*Interest: \_\_\_\_\_%

Address: East Highway 40

City: Roosevelt State: Utah Zip Code: 84066

2. \*PRIORITY OF CHANGE: July 31, 1992 \*FILING DATE: July 31, 1992

Is this change amendatory? (Yes/No): No

3. RIGHT EVIDENCED BY: 91-366, Cert. #a229, Morse Decree First Class

Prior Approved Temporary Change Applications for this right: t91-91-09; t92-91-03; t92-91-04;  
t92-91-05; t92-91-09; t92-91-10.

\*\*\*\*\* HERETOFORE \*\*\*\*\*

4. QUANTITY OF WATER: 7.98 cfs and/or \_\_\_\_\_ ac-ft.

5. SOURCE: Price River

6. COUNTY: Carbon

7. POINT(S) OF DIVERSION: \_\_\_\_\_  
S. 560 ft. & E. 680 ft. from 1/4 Cor. Sec. 1, T14S, R9E, SLB&M.

Description of Diverting Works: Concrete diversion dam, earthen ditches

## 8. POINT(S) OF REDIVERSION

The water has been reddiverted from \_\_\_\_\_ at a point: \_\_\_\_\_

Description of Diverting Works: \_\_\_\_\_

## 9. POINT(S) OF RETURN

The amount of water consumed is 7.98 cfs or \_\_\_\_\_ ac-ft.

The amount of water returned is \_\_\_\_\_ cfs or \_\_\_\_\_ ac-ft.

The water has been returned to the natural stream/source at a point(s): \_\_\_\_\_

\*These items are to be completed by the Division of Water Rights.

## 10. NATURE AND PERIOD OF USE

Irrigation: From March 1 to November 30  
 Stockwatering: From \_\_\_\_\_ to \_\_\_\_\_  
 Domestic: From \_\_\_\_\_ to \_\_\_\_\_  
 Municipal: From \_\_\_\_\_ to \_\_\_\_\_  
 Mining: From \_\_\_\_\_ to \_\_\_\_\_  
 Power: From \_\_\_\_\_ to \_\_\_\_\_  
 Other: From \_\_\_\_\_ to \_\_\_\_\_

## 11. PURPOSE AND EXTENT OF USE

Irrigation: 12,576.07 acres. Sole supply of 488.10 acres.

Stockwatering (number and kind): \_\_\_\_\_

Domestic: \_\_\_\_\_ Families and/or \_\_\_\_\_ Persons

Municipal (name): \_\_\_\_\_

Mining: \_\_\_\_\_ Mining District in the \_\_\_\_\_ Mine

Ores mined: \_\_\_\_\_

Power Plant name: \_\_\_\_\_ Type: \_\_\_\_\_ Capacity: \_\_\_\_\_

Other (describe): \_\_\_\_\_

## 12. PLACE OF USE

Legal description of place of use by 40 acre tract(s) Carbon Canal Delivery System

## 13. STORAGE

Reservoir Name: \_\_\_\_\_ Storage Period from \_\_\_\_\_ to \_\_\_\_\_

Capacity: \_\_\_\_\_ ac ft. Inundated Area: \_\_\_\_\_ acres

Height of dam: \_\_\_\_\_ feet

Legal description of inundated area by 40 tract(s): \_\_\_\_\_

## THE FOLLOWING CHANGES ARE PROPOSED

14. QUANTITY OF WATER: \_\_\_\_\_ cfs and/or 13.0 ac ft.

15. SOURCE: 1) Willow Creek 2) Underground Exploratory Wells

Balance of the water will be abandoned: \_\_\_\_\_, or will be used as heretofore: X

16. COUNTY: Carbon

17. POINT(S) OF DIVERSION: See Attached Sheet

Description of Diverting Works: 1) Portable pump to tank truck 4425 to 4667 feet deep  
2) Existing 5 1/2" casing  
COMMON DESCRIPTION 10 miles NE of Helper Matts Summit Quad

## 18. POINT(S) OF REDIVERSION

The water will be rediverted from \_\_\_\_\_ at a point \_\_\_\_\_

Description of Diverting Works: \_\_\_\_\_

## 19. POINT(S) OF RETURN

The amount of water to be consumed is \_\_\_\_\_ cfs or 13.0 ac ft.

The amount of water to be returned is \_\_\_\_\_ cfs or \_\_\_\_\_ ac ft.

The water will be returned to the natural stream/source at a point(s): \_\_\_\_\_

## -20. NATURE AND PERIOD OF USE

Irrigation: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_  
 Stockwatering: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_  
 Domestic: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_  
 Municipal: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_  
 Mining: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_  
 Power: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_  
 Other: From 7/31/92 to 11/30/92

## 21. PURPOSE AND EXTENT OF USE

Irrigation: \_\_\_\_\_ acres. Sole supply of \_\_\_\_\_ acres.  
 Stockwatering (number and kind) \_\_\_\_\_  
 Domestic: \_\_\_\_\_ families and/or \_\_\_\_\_ Persons.  
 Municipal (name) \_\_\_\_\_  
 Mining: \_\_\_\_\_ Mining District at the \_\_\_\_\_ Mine  
 Ones mined \_\_\_\_\_  
 Power Plant name \_\_\_\_\_ Type \_\_\_\_\_ Capacity \_\_\_\_\_  
 Other (describe) Exploration drilling, road construction, dust suppression

## 22. PLACE OF USE

Legal description of place of use by 40 acre tract(s) See Attached Sheet  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## 23. STORAGE

Reservoir Name: \_\_\_\_\_ Storage Period: from \_\_\_\_\_ to \_\_\_\_\_  
 Capacity \_\_\_\_\_ ac ft Inundated Area \_\_\_\_\_ acres  
 Height of dam \_\_\_\_\_ feet  
 Legal description of inundated area by 40 tract(s) \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## 24. EXPLANATORY

The following is set forth to define more clearly the full purpose of this application. Include any supplemental water rights used for the same purpose (Use additional pages of same size if necessary):  
This Temporary Change Application is being filed to replace t91-91-09 & t92-91-10 to correct the points of diversion and place of use. To date approximately 0.77 AF has been utilized under t91-91-09.

The undersigned hereby acknowledges that even though he/she/they may have been assisted in the preparation of the above numbered application through the courtesy of the employees of the Division of Water Rights, all responsibility for the accuracy of the information contained herein, at the time of filing, rests with the applicant(s)

Paul Price  
 Signature of Applicant(s)

West Hazmat Oil Field Services Inc.  
Temporary Change Application  
#t92-91-12 (91 Area)  
July 31, 1992

#17 Points of Diversion:

Willow Creek:

N. 320 ft. & W. 290 ft. from SE Cor. Sec. 3, T12S, R20E, SLB&M.

Shimmin Trust Wells:

Shimmin Trust #1: N. 793 ft. & W. 780 ft. from SE Cor. Sec. 11;  
Shimmin Trust #2: S. 1980 ft. & W. 800 ft. from NE Cor. Sec. 14;  
Shimmin Trust #3: S. 1980 ft. & E. 1780 ft. from NW Cor. Sec. 14;  
Shimmin Trust #4: N. 540 ft. & E. 1900 ft. from SW Cor. Sec. 11;  
Shimmin Trust #5: S. 660 ft. & W. 2340 ft. from NE Cor. Sec. 14;  
all T12S, R10E, SLB&M

#22 Place of Use:

1210-0806. S. 2400 ft. & E. 1769 ft. from NW Cor. Sec. 8 (SE4NW4)  
#7-9 Federal: S. 2109 ft. & W. 2038 ft. from NE Cor. Sec. 9 (SW4NE4)  
#4-15 Federal: S. 660 ft. & E. 450 ft. from NW Cor. Sec. 15 (NW4NW4)  
#4-13 Federal: S. 1174 ft. & E. 1168 ft. from NW Cor. Sec. 13 (NW4NW4)  
#9-10 Jensen: N. 2500 ft. & W. 1020 ft. from SE Cor. Sec. 10 (NE4SE4)  
#2-16 State: S. 180 ft. & W. 1971 ft. from NE Cor. Sec. 16 (NW4NE4)  
#9-16 State: N. 1293 ft. & W. 702 ft. from SE Cor. Sec. 16 (NE4SE4)  
#11-10 Jensen: N. 1650 ft. & E. 1650 ft. from SW Cor. Sec. 10 (NE4SW4)  
#5-10 Jensen: S. 1680 ft. & E. 660 ft. from NW Cor. Sec. 10 (SW4NW4)  
#16-10 Jensen: N. 330 ft. & W. 330 ft. from SE Cor. Sec. 10 (SE4SE4)  
#7-15 Jensen: S. 1650 ft. & W. 1650 ft. from NE Cor. Sec. 15 (SW4NE4)  
#11-11 Shimmin Trust: N. 2350 ft. & E. 1500 ft. from SW Cor. Sec. 11 (NE4SW4)  
#10-11 Shimmin Trust: N. 2300 ft. & W. 1850 ft. from SE Cor. Sec. 11 (NW4SE4)  
#12-12 Shimmin Trust: N. 2310 ft. & E. 990 ft. from SW Cor. Sec. 12 (NW4SW4)  
#14-12 Shimmin Trust: N. 660 ft. & E. 1980 ft. from SW Cor. Sec. 12 (SE4SW4)  
#11-15 Jensen: N. 1850 ft. & E. 1650 ft. from SW Cor. Sec. 15 (NE4SW4)  
#16-9 Jensen: N. 1150 ft. & W. 1150 ft. from SE Cor. Sec. 9 (SE4SE4)  
#16-15 Federal: N. 990 ft. & W. 990 ft. from SE Cor. Sec. 15 (SE4SE4)  
#14-14 Federal: N. 990 ft. & E. 1650 ft. from SW Cor. Sec. 14 (SE4SW4)  
#14-16 Federal: N. 990 ft. & W. 990 ft. from SE Cor. Sec. 14 (SE4SE4)  
#14-13 Federal: N. 990 ft. & E. 1650 ft. from SW Cor. Sec. 13 (SE4SW4)  
All T12S, R10E, SLB&M

Alternate Wells:

#12-9 Jensen: N. 2054 ft. & E. 592 ft. from SW Cor. Sec. 9 (NW4SW4)  
#14-9 Jensen: N. 675 ft. & E. 2170 ft. from SW Cor. Sec. 9 (SE4SW4)  
#4-16 State: S. 922 ft. & E. 750 ft. from NW Cor. Sec. 16 (NW4NW4)  
#11-16 State: N. 1980 ft. & E. 1980 ft. from SW Cor. Sec. 16 (NE4SW4)  
All T12S, R10E, SLB&M

STATE ENGINEER'S ENDORSEMENT

TEMPORARY CHANGE APPLICATION NUMBER: t92-91-12

1. July 31, 1992      Change Application received by BW.
2. July 31, 1992      Application designated for APPROVAL by MP
3. Comments:

## Conditions:

This application is hereby APPROVED, dated July 31, 1992, subject to prior rights and this application will expire on November 30, 1992.

*for* William L. Morgan  
Mark Page, Area Engineer  
for  
Robert L. Morgan, State Engineer



August 10, 1992

Division of Oil, Gas & Mining  
3 Triad Center, Suite 350  
Salt Lake City, UT 84180-1203  
Attn: Tammi Searing

Re: PG & E Resources Company  
#4-16 State  
922' FNL and 760' FWL  
NW NW Sec. 16, T12S - R10E  
Carbon County, Utah

Dear Tammi,

Enclosed please find three copies of the A.P.D. on the above mentioned well along with three copies of the drilling program. A temporary change application is on file with the Division of Water Rights, Price, Utah for use of the proposed water sources.

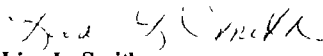
Please forward approved copies of the A.P.D. to Jim LaFevers at the following address:

PG & E Resources Company  
5950 Berkshire Lane, Suite 600  
Dallas, TX 75225

If you should need additional information, please feel free to contact me.

Sincerely,

PERMITCO INC.

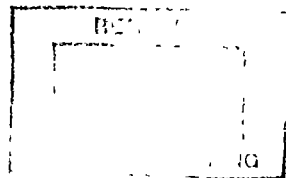
  
Lisa L. Smith  
Consultant for:  
PG & E Resources Company

Enc.

cc: PG & E - Dallas, TX  
PG & E - Vernal, UT

Permitco Incorporated  
A Petroleum Permitting Company

13585 Jackson Drive Denver Colorado 80241 (303) 452 8888



STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING

(Other instructions on reverse side)

1. Type of Work		2. Lease Designation and Serial No.	
a. <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		ML 44443	
b. Type of Well		3. If Indian Allottee or Tribe Name	
Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Coalbed Methane <input checked="" type="checkbox"/> Multiple <input type="checkbox"/>		N/A	
4. Name of Operator		4. Unit Agreement Name	
214/7750-3800		N/A	
PG & E Resources Company		5. Firm or Lease Name	
303/452-8888		State	
Permitco Inc. - Agent		6. Well No	
5950 Berkshire Lane, #600		#4-16	
Dallas, TX 75225		7. Field and Pool or Wildcat	
13585 Jackson Drive		Sec. 16, T12S - R10E	
Denver, CO 80241		8. Sec. T. R. M. or Bk. and Survey or Area	
9. Location of Well (Plot or section clearly and in accordance with any State or Federal Survey)		11. County or Parish	
At surface 922' FNL and 760' FWL		Carbon	
At proposed prod. zone NWNW Sec 16		State	
10. Distance in miles and direction from nearest town or post office*		12. No. of acres assigned to this well	
15 miles north of Price, Utah		160	
13. Distance from proposed location to nearest property or lease line (ft.) (Also to nearest drill line, if any)		14. Proposed depth	
760'		4835'	
15. Distance from proposed location to nearest well drilling completed or applied for on this lease (ft.)		16. Rotary or cable tools	
2800'		Rotary	
17. Elevations (Show whether DE, RT, GR, etc.)		18. Approx. date work will start*	
7612' GR		Immediately upon approval of this application	
19. PROPOSED CASING AND CEMENTING PROGRAM			
Size of Hole	Size of Casing	Weight per Foot	Length
12-1/4"	8-5/8"	24#	500'
7-7/8"	5-1/2"	17#	4835'
		350 sx or suffic to circ to surf.	
		490 sx, stage tool at 3200'	

PG & E Resources Company proposes to drill a well to 4835' to test the Blackhawk and Star Point Coals for coalbed methane. If productive, casing will be run and the well completed. If dry, the well will be plugged and abandoned as per State of Utah requirements.

See Drilling Program attached.

Bond coverage for this well is provided under Bond No. 8063-38-07 and 8057-26-00.

This location has been staked at non-standard spacing in accordance with the rules and regulations of the Div. of Oil, Gas & Mining, however, PG & E Resources Company is the lease holder of all acreage within 3/8 mile of the proposed location. Therefore, PG & E requests administrative approval of this exception location.

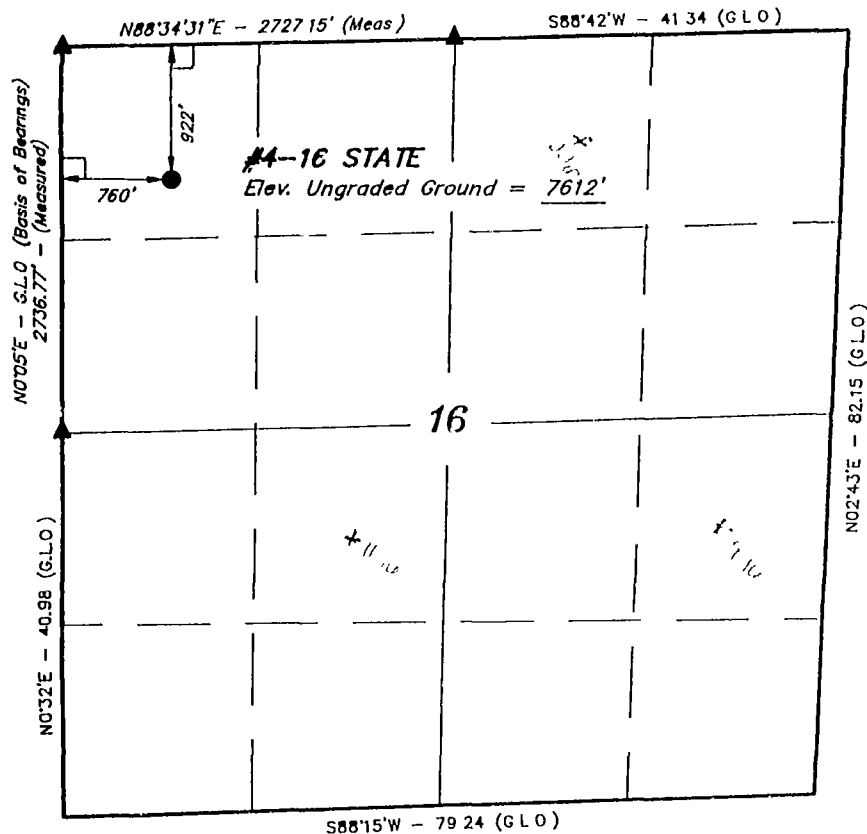
IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM. If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen, borehole only. Give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program if any.

20. Signature of Applicant	21. Consultant for	22. Date
<i>David S. Umeka</i>	PG & E Resources	8/10/92
(This space for Federal or State office use)		
Permit No.	Approval Date	
13 337-33170		
Approved by	Conditions of approval, if any	

APPROVED BY THE STATE  
OF UTAH DIVISION OF  
OIL, GAS, AND MINING

DATE *8/10/92*  
*DAVID S. UMKA*  
*8/10/92*

**T12S, R10E, S.L.B.&M.**



**LEGEND:**

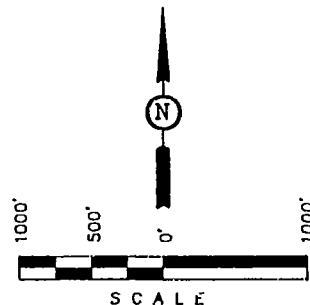
- └─┘ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED (1923 Brass Caps)

**PG&E RESOURCES COMPANY**

Well location, #4-16 STATE, located as shown in the NW 1/4 NW 1/4 of Section 16, T12S, R10E, S.L.B.&M. Carbon County, Utah.

**BASIS OF ELEVATION**

SPOT ELEVATION AT A RIDGE TOP LOCATED IN THE N 1/2 OF SECTION 16, T12S, R10E, S.L.B.&M. TAKEN FROM THE MATTS SUMMIT QUADRANGLE, UTAH, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY SAID ELEVATION IS MARKED AS BEING 7643 FEET



**CERTIFICATE**

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

*Robert L. King*  
REGISTERED LAND SURVEYOR  
REGISTRATION NO: 5709  
STATE OF UTAH

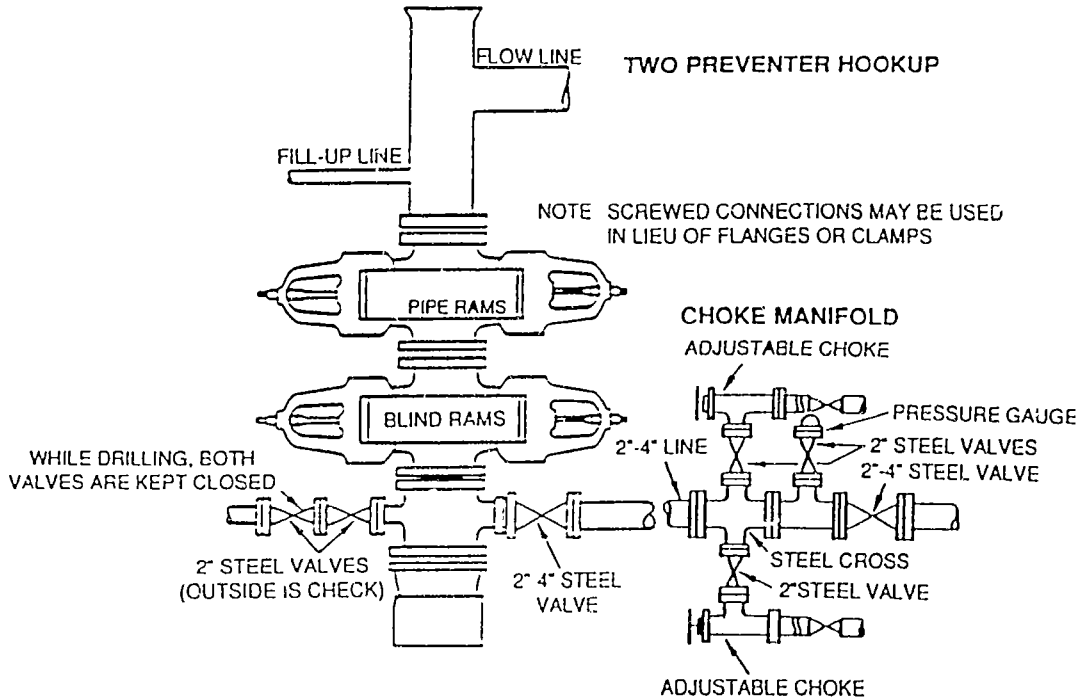
**UINTAH ENGINEERING & LAND SURVEYING**

85 SOUTH 200 EAST - VERNAL, UTAH 84078  
(801) 789-1017

SCALE 1" = 1000'	DATE SURVEYED 7-8-92	DATE DRAWN 7-18-92
PARTY GS RS TDH	REFERENCES GLO PLAT	
WEATHER WARM	FILE PG&E RESOURCES	

# PG&E RESOURCES COMPANY

## TYPICAL 2,000 PSI BLOWOUT PREVENTER SCHEMATIC



**CONFIDENTIAL - TIGHT HOLE**

**#4-16 STATE**  
**922' FNL and 760' FWL**  
**NW NW Sec. 16, T12S - R10E**  
**Carbon County, Utah**

**Prepared For:**

**PG & E RESOURCES COMPANY**

**By:**

**PERMITCO INC.**  
**13585 Jackson Drive**  
**Denver, Colorado 80241**  
**303/452-8888**

**Copies Sent To:**

- 3 - Division of Oil, Gas & Mining**
- 1 - PG & E Resources Co. - Vernal, Utah**
- 3 - PG & E Resources Co - Dallas, TX**



1. Formation Tops

The estimated tops of important geologic markers are as follows:

<u>Formation</u>	<u>Depth</u>
Flagstaff	Surface
Price River	2809'
Castlegate	3263'
Blackhawk	3617'
Aberdeen (S.P. II)	4535'
T.D.	4835'

2. Casing Program

The proposed casing program will be as follows:

<u>Purpose</u>	<u>Depth</u>	<u>Hole Size</u>	<u>O. D.</u>	<u>Weight</u>	<u>Grade</u>
Surface	0-500'	12-1/4"	8-5/8"	24#	K-55
Produc.	0-4835'	7-7/8"	5-1/2"	17#	N-80

Casing design subject to revision based on geologic conditions encountered.

3. Cement Program

The cement program will be as follows:

<u>Surface</u>	<u>Type and Amount</u>
0-500'	Cement to surface with 350 sx Premium Cement + 2% CaCl <sub>2</sub> + 0.25 #/sk Flocele (or equivalent). Centralizers will be run on bottom 3 joints plus every 4th joint to surface

Production

Type and Amount

Two stage cement to surface w/stage tool at 3200'. First Stage: 290 sx 50/50 Pozmix + 2% Gel + .25% Flocele. Second Stage: 200 sx Silica Lite + 4% Gel + 4% CaCl<sub>2</sub>.

4. Drilling Fluids

The proposed circulating mediums to be employed in drilling are as follows:

<u>Interval</u>	<u>Mud Type</u>	<u>Mud Wt.</u>	<u>Visc.</u>	<u>FL</u>	<u>PH</u>
0-500'	Air/Spud Mud	8.4-9.0	32-50	N/C	8.0-9.0
500-3500'	FW w/Gel Sweeps	8.4-8.8	28-32	N/C	8.0-9.0
3500-4835'	FW-LSND	8.6-9.0	34-45	10-15	8.0-9.0

5. Testing, Logging and Coring

The anticipated type and amount of testing, logging and coring are as follows:

- No drill stem tests are planned
- The logging program will consist of a Cased Hole Dual Spaced Neutron w/Gamma Ray, 2" & 5" from T D. to Base of Surface Casing and an Acoustic CBL/CCL, - 5" from T. D. to Base of Surface casing.
- No Cores are anticipated.

6. Spud Date/Drilling Time

- Drilling is planned to commence upon approval of this application.

When you find a hole in the wall, it will be necessary to see

the hole in the wall and the hole in the wall. The hole in the wall is the hole in the wall. The hole in the wall is the hole in the wall.

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1/10/1944  
1/10/1944  
1/10/1944  
1/10/1944  
1/10/1944  
1/10/1944

CONFIDENTIAL - RIGHT HOLE

Page 2

1. The first of the three main types of the hole is the hole which is formed by the action of the hole-drilling machine.

2. The second of the three main types of the hole is the hole which is formed by the action of the hole-drilling machine.

3. The third of the three main types of the hole is the hole which is formed by the action of the hole-drilling machine.

4. The fourth of the three main types of the hole is the hole which is formed by the action of the hole-drilling machine.

5. The fifth of the three main types of the hole is the hole which is formed by the action of the hole-drilling machine.

6. The sixth of the three main types of the hole is the hole which is formed by the action of the hole-drilling machine.

7. The seventh of the three main types of the hole is the hole which is formed by the action of the hole-drilling machine.

8. The eighth of the three main types of the hole is the hole which is formed by the action of the hole-drilling machine.

9. The ninth of the three main types of the hole is the hole which is formed by the action of the hole-drilling machine.

10. The tenth of the three main types of the hole is the hole which is formed by the action of the hole-drilling machine.

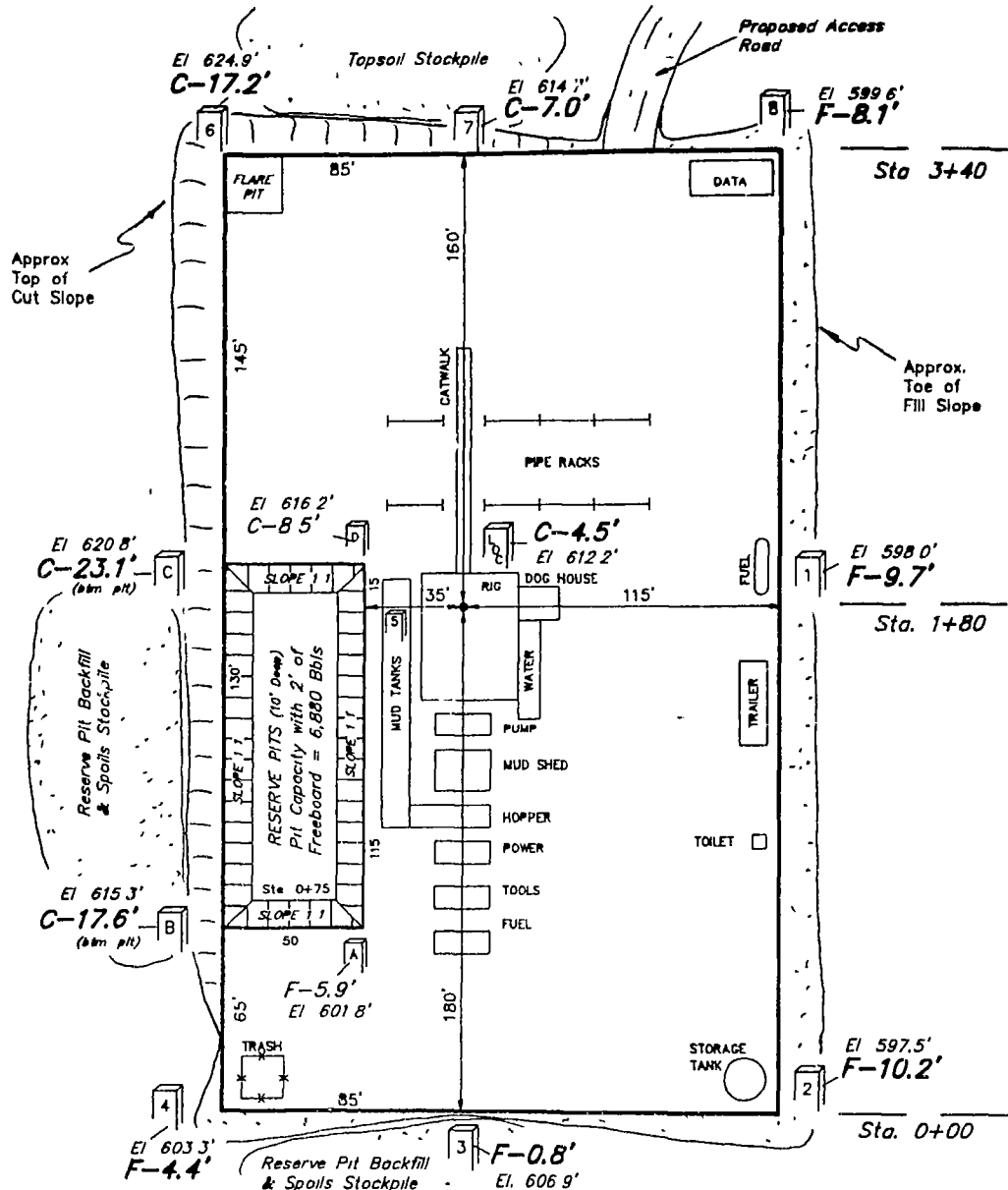
11. The eleventh of the three main types of the hole is the hole which is formed by the action of the hole-drilling machine.



- c. The accumulator system shall have a pressure capacity to provide for repeated operation of hydraulic preventers.
- d. Drill string safety valve(s), to fit all tools in the drill string, are to be maintained on the rig floor while drilling operations are in progress.

9. Anticipated Pressures

- a. The expected maximum bottom hole pressure is 2098 psi (.134 psi/ft). The maximum surface pressure is 1034 psi (based on partially evacuated hole at 0.22 psi/ft.)
- b. No hydrogen sulfide gas or abnormal pressures are anticipated.



#### APPROXIMATE YARDAGES

CUT	
(6") Topsoil Stripping	= 1,260 Cu Yds
Remaining Location	= 11,140 Cu Yds
<b>TOTAL CUT</b>	<b>= 12,400 CU.YDS</b>
<b>FILL</b>	<b>= 9,740 CU YDS</b>

EXCESS MATERIAL AFTER 5% COMPACTION	= 2,150 Cu Yds
Topsoil & Pit Backfill (1/2 Pit Vol)	= 2,150 Cu Yds
EXCESS UNBALANCE (After Rehabilitation)	= 0 Cu Yds

ELEV  
ELEV

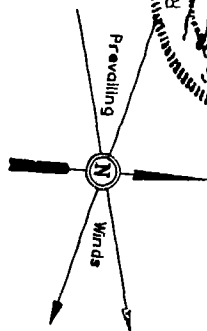
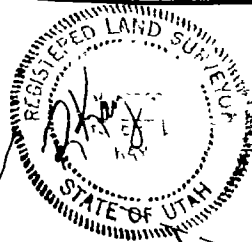
# P.G.&E RESOURCES CO.

## LOCATION LAYOUT FOR

#4-16 STATE

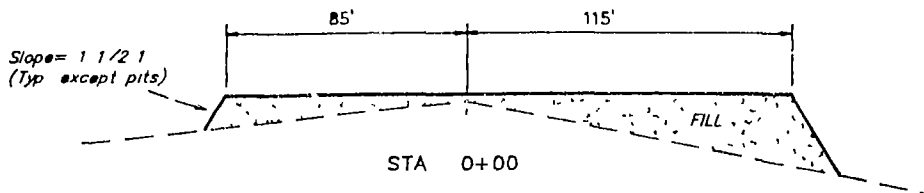
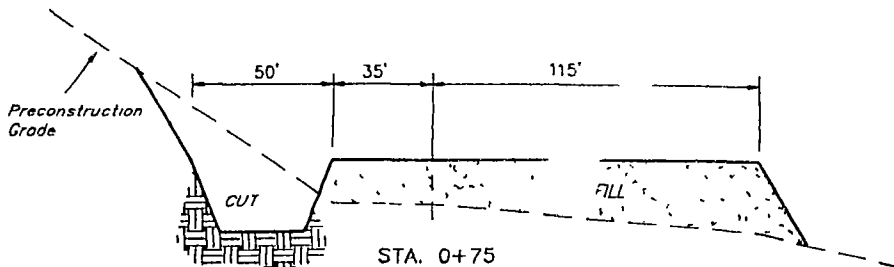
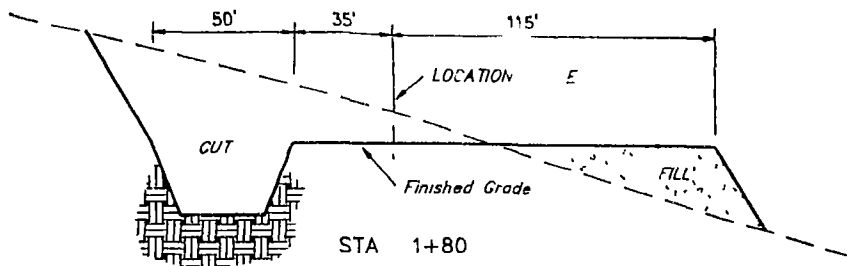
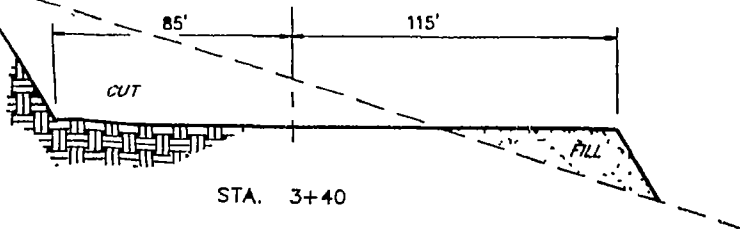
SECTION 16, T12S, R10E, S.L.B.&M.

922' FNL 760' FWL



SCALE. 1" = 50'  
DATE. 7-18-92  
Drawn By TDH

X-Section  
Scale  
1" = 20'  
1" = 50'

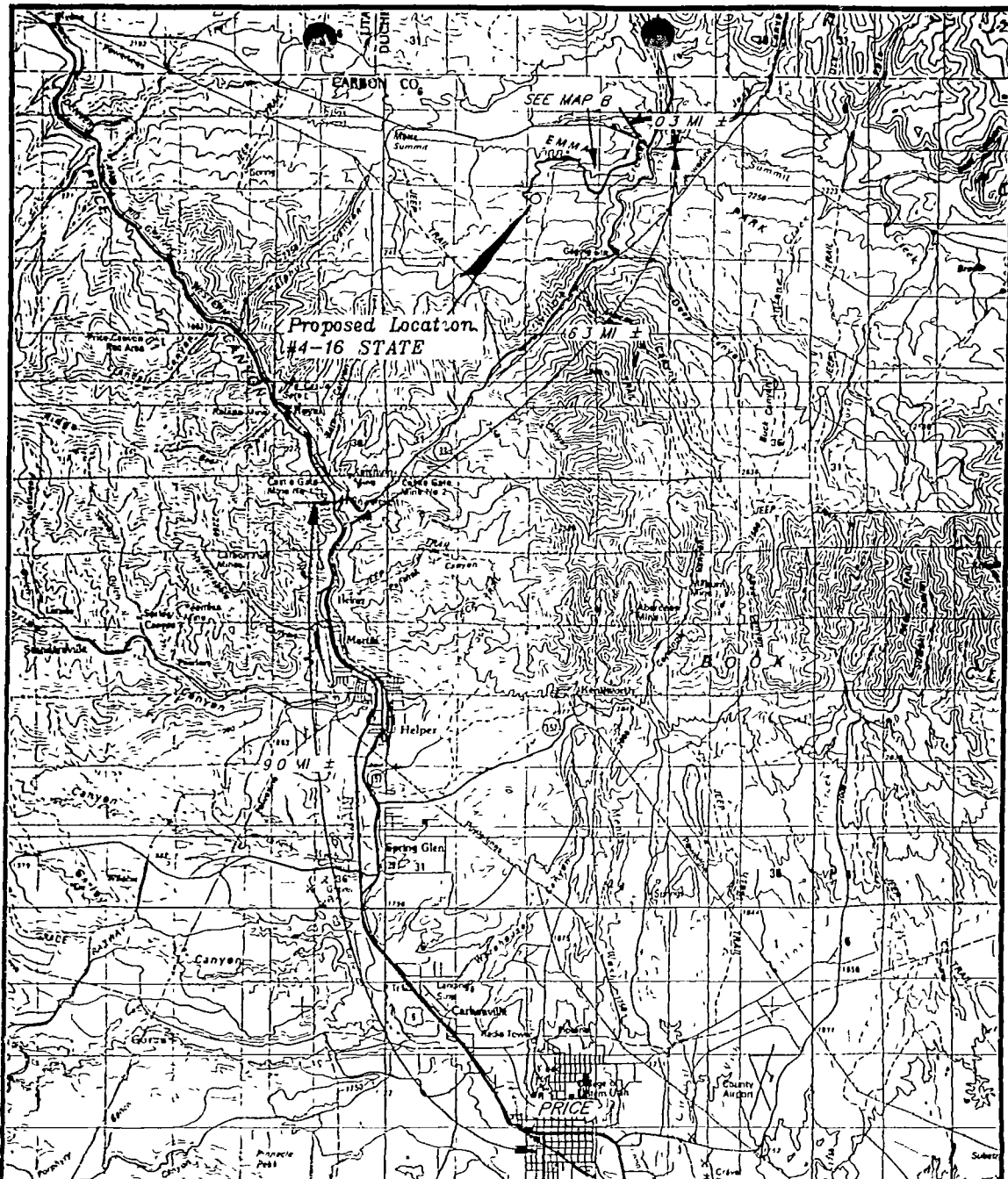


TYP. LOCATION LAYOUT  
TYP. CROSS SECTIONS

UNGRADED GROUND AT LOC STAKE = 7612.2'  
GRADED GROUND AT LOC STAKE = 7607.7'

UINTAH ENGINEERING & LAND SURVEYING

88 So 200 East Vernal Utah



TOPOGRAPHIC  
MAP "A"

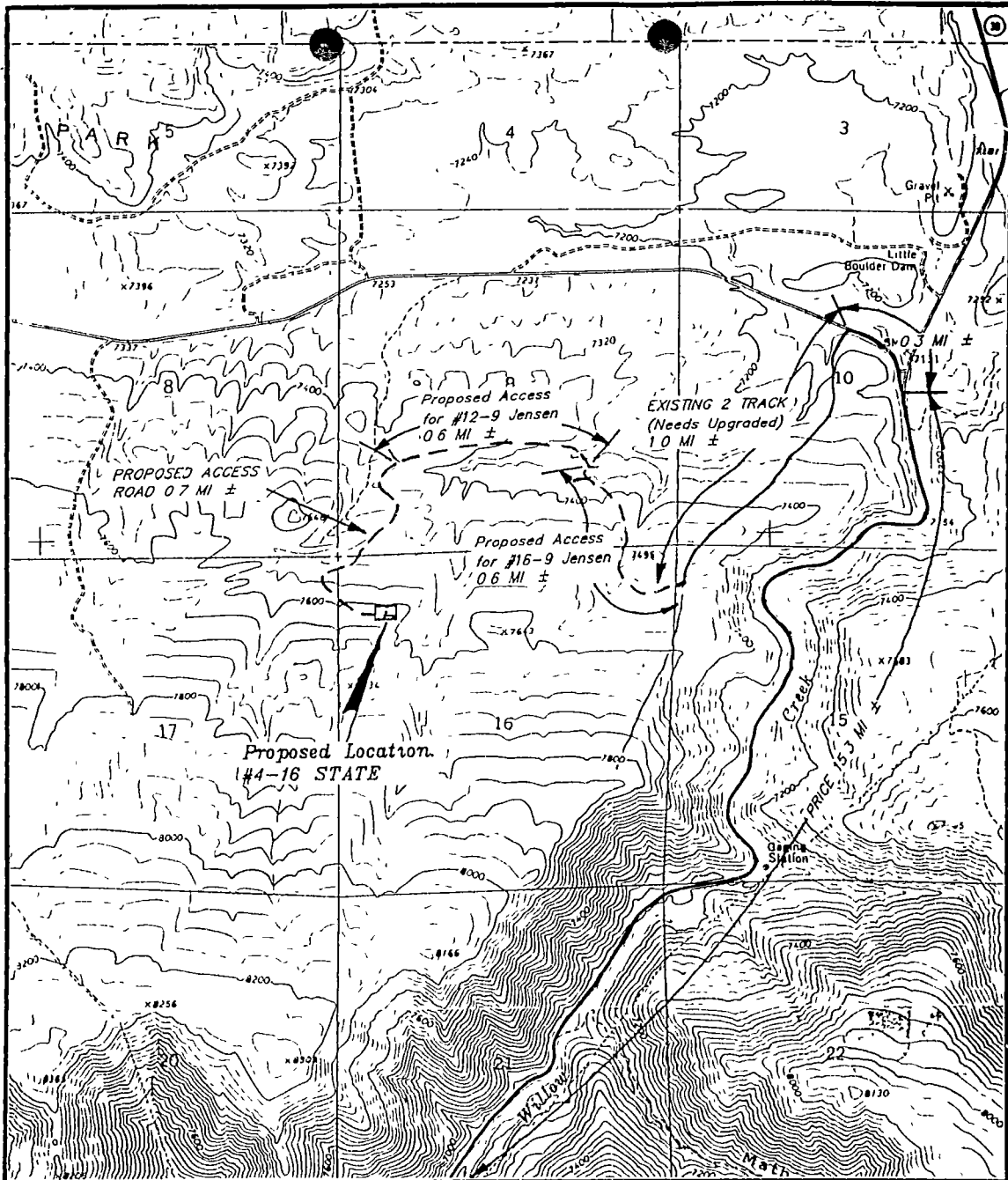
DATE 7-19-92 JLG



PG&E RESOURCES COMPANY

#4-16 STATE  
SECTION 16, T12S, R10E, S1B & M

922' FNL 760' FWL



# TOPOGRAPHIC

## MAP "B"

SCALE 1" = 2000'

DATE 7-19-92 JLG



## PG&E RESOURCES COMPANY

#4-16 STATE

SECTION 16, T12S, R10E, S.L.B.&M

922' FNL 760' FWL

WORKSHEET  
APPLICATION FOR PERMIT TO DRILL

DATE RECEIVED: 08/12/92

OPERATOR: PG & E RESOURCES COMPANY  
WELL NAME: STATE 4-16

OPERATOR ACCT NO: N-0595

API NO. ASSIGNED: 43 - 07 - 30170

LEASE TYPE: STA LEASE NO: ML-44443  
LOCATION: NWNW 16 - T12S - R10E CARBON COUNTY  
FIELD: WILDCAT FIELD CODE: 31

RECEIVED AND/OR REVIEWED:

☒ Plat  
☒ Bond  
(Number \_\_\_\_\_)  
☒ Potash (Y/N)  
☒ Oil shale (Y/N)  
☒ Water permit  
(Number +90-91-17 91-aug)  
☒ RDCC Review (Y/N)  
(Date: 8-13-92)

LOCATION AND SITING:

\_\_\_ R649-2-3. Unit: \_\_\_\_\_  
\_\_\_ R649-3-2. General.  
☒ R649-3-3. Exception.  
\_\_\_ Drilling Unit.  
\_\_\_ Board Cause no: \_\_\_\_\_  
Date: \_\_\_\_\_

COMMENTS:

Minor additional written doc. 11s.  
Permit 8-13 92 / Biology minor 8-18 92  
☒ Exception location requested

STIPULATIONS:

- cc. It lands
1. The reserve pits should be inspected after construction to determine if a synthetic liner is required.
  2. The downhill side of the location is to be bermed to prevent runoff from the location

RDCC Agenda  
September 8, 1992  
6

26. UT920818-070  
*PG & E*  
Division of Oil, Gas & Mining/Carbon County: Application for Permit to Drill - Proposal to drill a wildcat well, the Shimmin Trust No. 14-12 well, on a private lease (Sec. 12, T12S, R10E). Comments due 9-8-92. 1085
27. UT920818-080  
*PG & E*  
Division of Oil, Gas & Mining/Carbon County: Application for Permit to Drill - Proposal to drill a wildcat well, the State No. 4-16 well, on state lease ML-44443 (Sec. 16, T12S, R10E). Comments due 9-8-92. 13-057-30172 1112
28. UT920831-020  
*Hillwood Petr.*  
Division of Oil, Gas & Mining/Daggett County: Application for Permit to Drill - Proposal to drill a wildcat well, the Olsen No. 13-20 well on a private lease (Sec. 20, T3N, R19E). Comments due 9-15-92. 171
29. UT920901-020  
*PG & E*  
Division of Oil, Gas & Mining/Carbon County: Application for Permit to Drill - Proposal to drill a wildcat well, the State No. 11-16, on State lease ML 44443 (Sec. 16, T12S, R10E). Comments due 9-15-92. 113
- B. Federal
30. UT910204-060  
DOI/BLM: Salt Lake District Office - Off Highway Vehicle (OHV) designations in the Pony Express Resource Area - Plan amendment. Comments due 9-14-92.
31. UT920828-060  
USDA/Forest Service: Fishlake National Forest - Pine Creek Sulphurbed Pinyon-Juniper Control Project - Scoping document. Comments due 9-14-92.

# SOUTHEASTERN UTAH ASSOCIATION OF LOCAL GOVERNMENT

WILLIAM D. HOWELL  
Executive Director

P O Drawer 1106  
Price, Utah 81501 • Telephone 637-5444

## AREAWIDE CLEARINGHOUSE A-95 REVIEW

14 01 07

NOI \_\_\_\_\_ Preapp \_\_\_\_\_ App \_\_\_\_\_ State Plan \_\_\_\_\_ State Action X Subdivision \_\_\_\_\_ (ASP # 8-819-15, 16, 17, 18, 19, 20, 21, 22, 23)

Other (indicate) \_\_\_\_\_ SAI Number UT 930 818-710-050

### Applicant (Address, Phone Number)

Oil, Gas and Mining  
355 West North Temple  
3 Triad Center, Ste 350  
Salt Lake City, Utah 84180-1203

### Federal Funds

Requested: \_\_\_\_\_

### Title

APPLICATION FOR PERMIT TO DRILL

RECEIVED

SEP 02 1992

DIR. OF  
MINING

- ☒ No comment  
☐ See comments below  
☐ No action taken because of insufficient information  
☐ Please send your formal application to us for review Your attendance is requested ☐

The applicant should forward any written review comments to the funding agency. Any written response to those comments should be forwarded to the State Clearinghouse and also to the funding agency.

### Comments

Marjorie M. Wagner  
Authorizing Official

8-31-92  
Date



Norman H. Bangerter  
Governor  
Dee C. Hansen  
Executive Director  
Dianne R. Nielson, Ph.D.  
Division Director

# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

355 West North Temple  
3 Triad Center Suite 350  
Salt Lake City, Utah 84180-1203  
801 538 5346

September 9, 1992

PG & E Resources Company  
5950 Berkshire Lane #600  
Dallas, Texas 75225

Gentlemen,

Re: State #4-16 Well, 922 feet from the north line, 760 feet from the west line, NW 1/4 NW 1/4, Section 16, Township 12 South, Range 10 East, Carbon County, Utah

Pursuant to Utah Admin. R. 649-3-3, Exception to Location and Siting of Wells and Utah Admin. R. 649-3-4, Permitting of Wells to be Drilled, Deepened or Plugged-Back, approval to drill the referenced well is hereby granted.

In addition, the following specific actions are necessary to fully comply with this approval:

1. The reserve pit should be inspected after construction to determine if a synthetic liner is required.
2. The downhill side of the location is to be bermed to prevent runoff from the location.
3. Compliance with the requirements of Utah Admin. R. 649-1 et seq., Oil and Gas Conservation General Rules.
4. Notification within 24 hours after drilling operations commence.
5. Submittal of Entity Action Form, Form 6, within five working days following commencement of drilling operations and whenever a change in operations or interests necessitates an entity status change.
6. Submittal of the Report of Water Encountered During Drilling, Form 7.

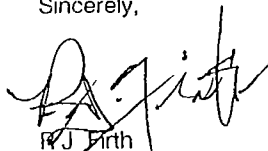
Page 2  
PG & E Resources Company  
State #4-16 Well  
September 9, 1992

7. Prompt notification prior to commencing operations, if necessary, to plug and abandon the well. Notify Frank R. Matthews, Petroleum Engineer, (Office) (801)538-5340, (Home) (801)476-8613, or R J Firth, Associate Director, (Home) (801)571-6068
8. Compliance with the requirements of Utah Admin R 649-3-20, Gas Flaring or Venting, if the well is completed for production

Trash and sanitary waste should be properly contained and transported to approved disposal locations, not retained in or disposed of in pits on location or downhole. Prior to the commencement of drilling operations, the operator should consult the local/county sanitarian and/or the Department of Environmental Quality, Division of Drinking Water/Sanitation, regarding appropriate disposal of sanitary waste.

This approval shall expire one year after date of issuance unless substantial and continuous operation is underway or a request for an extension is made prior to the approval expiration date. The API number assigned to this well is 43-007-30172

Sincerely,

A handwritten signature in black ink, appearing to read 'R J Firth', written over a horizontal line.

R J Firth  
Associate Director, Oil and Gas

ldc  
Enclosures  
cc: Bureau of Land Management  
J L Thompson  
WO11

## DRILLING LOCATION ASSESSMENT

### **State of Utah Division of Oil, Gas and Mining**

OPERATOR: PG&E RESOURCES CO. WELL NAME: #4-16 STATE  
SECTION: 16 TWP: 12S RNG: 10E LOC: 922 FNL 760 FWL  
QTR/QTR NW/NW COUNTY: CARBON FIELD: COALBED METHANE  
SURFACE OWNER: STATE OF UTAH  
SPACINC: 460 F SECTION LINE 460 F QTR/QTR LINE 920 F ANOTHER WELL  
GEOLOGIST: BRAD HILL DATE AND TIME: 7/20/92 11:45

PARTICIPANTS: Lisa Smith-Permitco, Dean Shimmin-Landowner, Robert Kay-Uintah Engineering

REGIONAL SETTING/TOPOGRAPHY: The proposed location is on the western edge of the Book Cliffs physiographic province. It is located on the Flagstaff dip slope partially on a flat area near a ridge top and partially on the slope.

#### LAND USE:

CURRENT SURFACE USE: Domestic grazing and wildlife habitat.

PROPOSED SURFACE DISTURBANCE: The proposed pad is rectangular in shape with approximate dimensions of 340'X 200' including a 130'X 50' reserve pit. Approximately .7 miles of new road will be constructed for access.

AFFECTED FLOODPLAINS AND/OR WETLANDS: None

FLORA/FAUNA: Sage, Oak, Scattered Grasses, Lupine, Snowberry  
/Cows, Deer, Elk, Rabbits, Rodents, Birds

#### ENVIRONMENTAL PARAMETERS

##### SURFACE GEOLOGY

SOIL TYPE AND CHARACTERISTICS: Clayey-silt with occasional limestone fragments.

SURFACE FORMATION & CHARACTERISTICS: Quaternary alluvium and Flagstaff Limestone

EROSION/SEDIMENTATION/STABILITY: No active erosion or sedimentation at present. Location should be stable.

PALEONTOLOGICAL POTENTIAL: None observed.

## SUBSURFACE GEOLOGY

OBJECTIVES/DEPTHS: Blackhawk-3617', Aberdeen-4535'

ABNORMAL PRESSURES-HIGH AND LOW: None anticipated.

CULTURAL RESOURCES/ARCHAEOLOGY: NA

CONSTRUCTION MATERIALS: Onsite materials will be used for construction.

SITE RECLAMATION: As per Division of State Lands instructions.

### RESERVE PIT

CHARACTERISTICS: A rectangular reserve pit will be constructed with approximate dimensions of 130'X 50'X 10'.

LINING: The reserve pit is to be evaluated after construction to determine if a synthetic liner is required.

MUD PROGRAM: 0-500'-air/spud mud; 500'-3500'-FW w/Gel Sweeps; 3500'-4835'-FW-LSND

DRIILLING WATER SUPPLY: Drilling water will be from the existing Shimmins Trust wells.

### STIPULATIONS FOR APD APPROVAL

The reserve pit is to be evaluated after construction.  
The down hill side of the location is to be bermed to prevent run off from the location.

### ATTACHMENTS

Photographs will be placed on file.



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt  
Governor

Ted Stewart  
Executive Director

James W. Carter  
Division Director

355 West North Temple

3 Third Center Suite 350

Salt Lake City, Utah 84103-1203

Phone 531 5340

801 359 3940 (Fax)

801 531 5319 (TDD)

February 14, 1994

PG & E Resources Company  
5950 Berkshire Lane, #600  
Dallas, Texas 75225

Re Application for Permit to Drill  
Well No State #4-16  
NWNW, Sec 16, T 12S, R 10E  
Carbon County, Utah  
API No 43-007-30172

Dear Sirs:

Your referenced application submitted for approval was approved January 31, 1990. In accordance with R.649-3-4-4 the Division rescinds its approval of the referenced application.

In order to drill this well in the future, a new application will have to be submitted.


Yours truly,

Frank Matthews  
Petroleum Engineer

cc R J Firth  
State Lands and Forestry  
Well file

# STATE ACTIONS

Mail to  
RDCC Coordinator  
116 State Capitol  
Salt Lake City, Utah 84114

1.	ADMINISTERING STATE AGENCY OIL, GAS AND MINING 355 West North Temple 3 Triad Center, Suite 350 Salt Lake City, Utah 84180-1203	2	STATE APPLICATION IDENTIFIER NUMBER (assigned by State Clearinghouse)
		3	APPROXIMATE DATE PROJECT WILL START: Upon approval
4	AREAWIDE CLEARING HOUSE(s) RECEIVING STATE ACTIONS (to be sent out by agency in block 1) Southeastern Utah Association of Governments		
5	TYPE OF ACTION <input type="checkbox"/> Lease <input checked="" type="checkbox"/> Permit <input type="checkbox"/> License <input type="checkbox"/> Land Acquisition <input type="checkbox"/> Land Sale <input type="checkbox"/> Land Exchange <input type="checkbox"/> Other _____		
6.	TITLE OF PROPOSED ACTION Application for Permit to Drill		
7	DESCRIPTION PG & E Resources Company proposes to drill the State #1-16 well (wildcat) on state lease ML-44443, Carbon County, Utah. This action is being presented to RDCC for consideration of resource issues affecting state interests. The Division of Oil, Gas and Mining is the primary administrative agency in this action and must issue approval before operations commence.		
8	LAND AFFECTED (site location map required) (indicate county) NW/4, NW/4, Section 16, Township 12 South, Range 10 East, Carbon County, Utah		
9	HAS THE LOCAL GOVERNMENT(s) BEEN CONTACTED?		
10	POSSIBLE SIGNIFICANT IMPACTS LIKELY TO OCCUR: Degree of impact is based on the discovery of oil or gas in commercial quantities		
11	NAME AND PHONE NUMBER OF DISTRICT REPRESENTATIVE FROM YOUR AGENCY NEAR PROJECT SITE, IF APPLICABLE		
12	FOR FURTHER INFORMATION, CONTACT  Frank R. Matthews PHONE 538-5340	13	SIGNATURE AND TITLE OF AUTHORIZED OFFICIAL.  DATE 8-14-92      Petroleum Engineer

WO1187